

**REMARKS**

The amendments and remarks presented herein are believed to be fully responsive to the Office Action.

Claims 1-4, 8-17 and 19-20 are pending in the present application. Claims 12 and 20 have been amended. No new matter has been added. The independent claims recited by the present application are claims 1, 12 and 20.

Amendments to claims 12 and 20 have been made only to meet the patentable subject matter requirements under 35 U.S.C. 101. The claimed invention amended herein is directed to statutory subject matter under 35 U.S.C. 101 in that the step of selecting a specific random channel is performed by a channel server.

**CLAIM REJECTIONS:**

The Office Action states that claims 1-4, 8-17 and 19-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cordero et al (U.S. Patent Publication No. 2001/0044339) (hereinafter “Cordero et al.”) in view of Pachnis et al. (U.S. Patent Publication No. 2007/0218980) (hereinafter “Pachnis et al.”). Applicants respectfully traverse these rejections.

**First of all, Pachnis et al. is not qualified for 103(a) reference in view of 102(e).** The present application is entitled to its 35 U.S.C. 119 **foreign priority date (April 8, 2004)** through its PCT application No. PCT/KR05/01924 whose filing date is **April 8, 2005**. Since Pachnis et al. was not published before the PCT filing date of the present application, only 102(e) reference date could be applied. However, the PCT filing date (**April 8, 2005**) of the present application predates the foreign priority date (**April 14, 2005**) of Pachnis et al. Furthermore, according to

MPEP §2136.03, “the foreign priority date of the reference under 35 U.S.C. 119(a)-(d) (f), and 365(a) cannot be used to antedate the application filing date. In contrast, applicant may be able to overcome the 35 U.S.C. 102(e) rejection by proving he or she is entitled to his or her own 35 U.S.C. 119 priority date which is earlier than the reference's U.S. filing date.” (citing In re Hilmer, 359 F.2d 859, 149 USPQ 480 (CCPA 1966)). As such, Pachnis et al. cannot be used as 103(a) reference in view of 102(e).

Claims 1, 12 and 20

Both Cordero et al. and Pachnis et al or combination thereof fails to teach or suggest all the elements recited in the independent claims 1, 12 and 20 of the present application.

The claimed invention is directed to a matchmaking service for multiplayer online computer games. The claimed invention prevents collaborative users for deceit from manipulating matchmaking by conspiring together to enter a same game room. To achieve the goal, the claimed invention determines game behavior patterns of players **based on the respective players' actual playing of the game** and the channel server disclosed by the claimed invention selects one of the random channels for the game based on the respective users' game behavior pattern information. **The claimed invention eliminates the “desires” of the players in a matchmaking process by assigning the player to a game channel based on the game behavior pattern of the player (independent of the player's selection or desire), whereas the matchmaker server disclosed in Cordero et al. matches players based upon availability of the game servers and selection of the players, independent of the respective players' actual playing of the game.**

The claims recite, among the other limitations, the following limitations:

- (a) monitoring respective users' actual playing of the game;
- (b) analyzing how the respective users have played the game based upon game skill and patterns of the play;
- (c) determining game behavior patterns of the respective users by using the at least one behavior pattern reference stored in the user behavior pattern database based on the respective users' actual playing of the game; and
- (d) selecting a specific random channel **according to the determined game behavior pattern of the user.**

The Office Action states that Cordero et al. teaches the claimed invention, except for the limitation (a) monitoring respective users' actual playing of the game of the claimed invention. Applicant respectfully traverses such characterization of Cordero et al. For example, pg 5-6, par 47-50 of Cordero et al. recites as follows:

[0047] The matchmaker server 124 and the matchmaker 208 component provide matchmaking functionality to enable a player to locate game servers 134 in the network 10 that satisfy player-defined requirements (e.g., game name, number of players, rules, ping time). The matchmaker server 124 preferably has a database of game servers 134 located in the network 10 with specifications (e.g., game type, number of simultaneous players, etc.) for each game server 134 included in the database. More than one matchmaker server 124 may be provided in the system 100.

[0048] Referring next to FIGS. 8A-8 C, the functionality of the matchmaker server 124 will now be discussed in greater detail. A matchmaker server 124 may have stored in a database thereon a list of game servers 134 for one or more multi-player games, e.g., game X, game Y, etc. When a client computer 200 requests a game server for game X via the matchmaker component 208, matchmaker server 124 can return to the client computer 200 available game X game servers 134. With that information returned to the client computer 200 from the matchmaker server 124, the client computer 200 can connect to and participate in multi-player

game play on any of the game X game servers 134. Similarly, the matchmaker server 124 can direct a client computer 200 to a game Y game server 134. For example, if client computer 200 desires to participate in game Y, a request may be communicated by the matchmaker component 208 resident on the client computer 200 to the matchmaker server 124 (designated as 1 in the figure). Matchmaker server 124 determines the game Y servers 134 available to the client computer, and communicates a list of those servers to the client computer 200 (designated as 2 in the figure). Selection of the game Y server 134 to which the client computer 200 ultimately connects is then left up to the user of the client computer 200. In FIG. 8A, client computer has elected to connect with game server Syl (designated as in the figure).

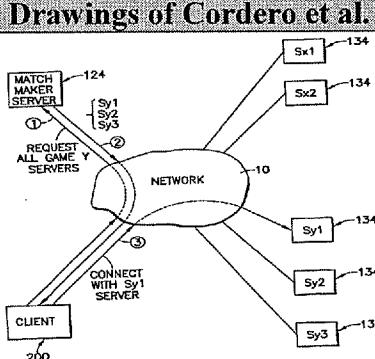
[0049] Alternatively, and as depicted in FIG. 8B, the matchmaker server 124 can return to the client computer 200 a particular game X game server 134, to which the client computer 200 can then connect and engage in multi-player game play of game X. In FIG. 8B, the client computer has communicated a request to the game server 124 (via the matchmaker component 208) for a list of any game X server 134 (designated as 1 in the figure). Game server 124 returns information on game server Sx2 to the client computer 200 (designated as 2 in the figure). The client computer 200 then establishes a connection to game server Sx2 (designated as 3 in the figure).

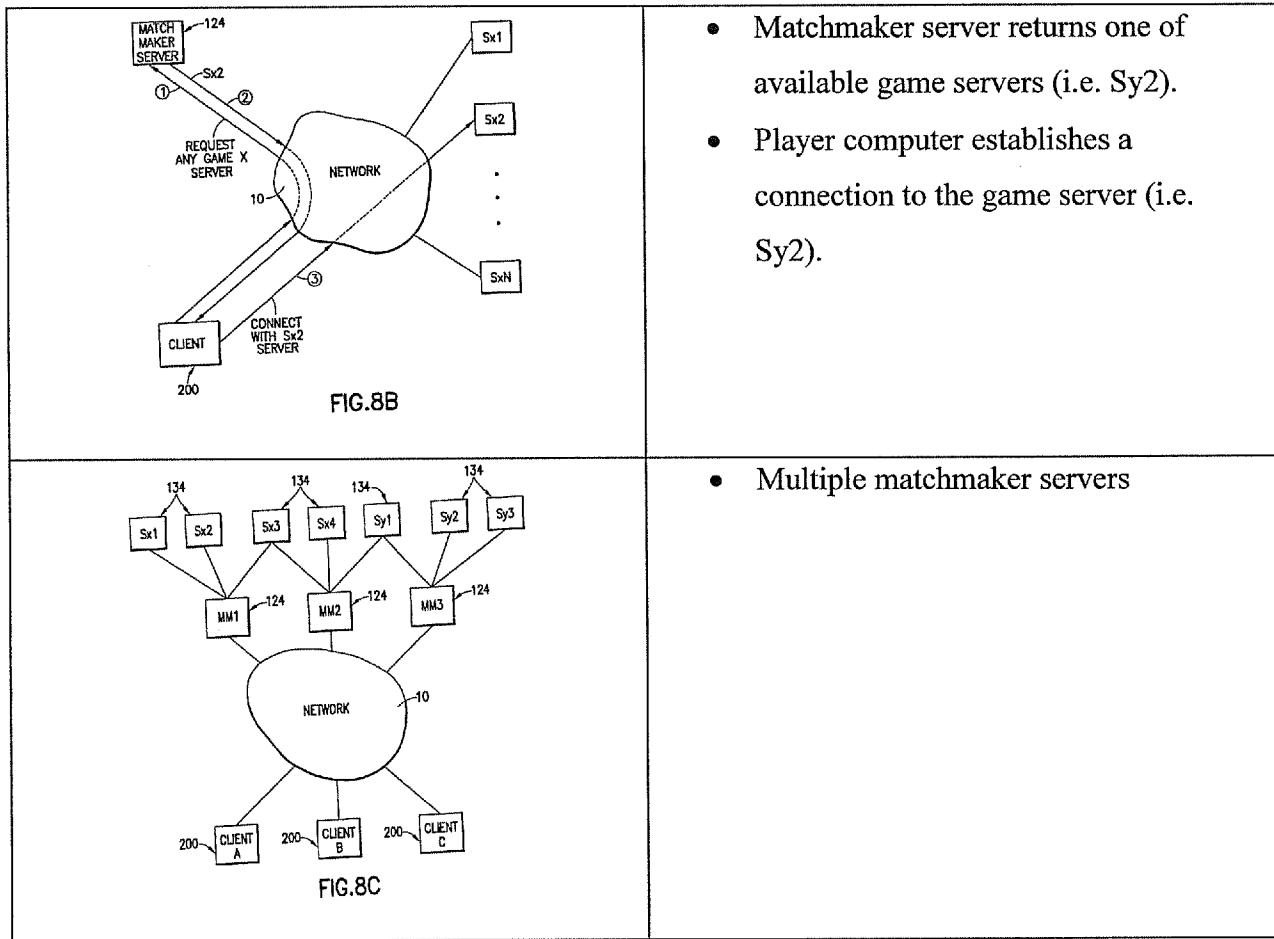
[0050] In another embodiment, depicted in FIG. 8C, a plurality of matchmaker servers 124 may have respectively stored thereon lists of game servers 134 for one or more multi-player games, e.g., game X, game Y, game Z, etc. That configuration provides enhanced reliability and load balancing between and among the plurality of matchmaker servers 124. If one matchmaker server 124 is experiencing problems or is overwhelmed with requests from a plurality of client computers 200, another matchmaker server 124 can provide matchmaker functionality. A request from client computer A for a game X server may be handled by matchmaker server 1 (MM1) or 2 (MM2), both servers having information on game X servers. Similarly, matchmaker server 2 (MM2) and 3 (M3) can handle request for game Y servers.

As disclosed in the specification and Figs. 8A-C of Cordero et al., the matchmaker server 124 provide matchmaking functionality to enable a player to locate game servers 134 in the

network 10 that satisfy player-defined requirements (e.g., game name, number of players, rules, ping time). **The matchmaker server 124 of Cordero et al. matches the players to one of multiple game servers (i.e. Sx1, Sx2, Sy1, Sy2, Sy3...) based on (1) availability of the game servers and (2) the final selection of the players.** Cordero et al. does not teach or suggest the method of selecting a specific random channel according to the determined game behavior pattern of the user (the respective players' actual playing of the game).

Referring to FIGS. 8A-8C below, Cordero et al. discloses three embodiments of the matchmaker server 124. Upon receipt of a request from a player, the matchmaker server 124 of Cordero et al. checks availability of the multiple game servers (i.e. Sx1, Sx2, Sy1, Sy2, Sy3...) and provides the player with one or more available game servers so that the player can be connected to one of the available game servers. In the embodiment illustrated in Fig. 8A, the matchmaker server returns a list of available game servers so that the player can select one of the available game servers. In another embodiment illustrated in Fig. 8B, the matchmaker server returns only one of the available game servers such that the player computer then establishes a connection to the game server without election thereof. Cordero et al. further discloses multiple matchmaker servers as illustrated in Fig. 8C below.

Drawings of Cordero et al.	Embodiments
 <p>FIG. 8A</p>	<ul style="list-style-type: none"><li>• Matchmaker server returns a list of available game servers (i.e. Sy1, Sy2, Sy3).</li><li>• Player selects one of the available game servers (i.e. Sy1).</li></ul>



Cordero et al. further discusses that the request from the players may include certain performance characteristics as follows:

[0051] In each of the above-described embodiments of the matchmaker server 124 (depicted in FIGS. 8A-8C), the request from the client computer 200 to locate a game server 134 may include certain performance characteristics desired of the game server 134 and client computer 200 and the connection therebetween. For example, a client may submit, in its request to the matchmaker server 124, criteria such as game name, number of players, rules, world in which the game is being played, and ping-time (e.g., best performance, least latency, random selection, etc.).

The performance characteristics disclosed in Cordero et al. are not related to the player's actual playing of the game but related to the online connection between the game server and the

player's computer. Ping is a computer network tool used to test whether a particular host is reachable across an IP network; it is also used to self test the network interface card of the computer, or as a speed test. In network multiplayer games, the server notes the time it requires for a game packet to reach a client and a response to be received. This round-trip time is usually reported as the player's 'ping'. It is used as an effective measurement of the player's lag, with lower ping times being desirable. As such, Cordero et al. does not teach or suggest the limitations of: monitoring respective users' actual playing of the game; analyzing how the respective users have played the game based upon game skill and patterns of the play; determining game behavior patterns of the respective users by using the at least one behavior pattern reference stored in the user behavior pattern database based on the respective users' actual playing of the game; and selecting a specific random channel according to the determined game behavior pattern of the user.

Even assuming, for the sake of argument, that the matchmaking server of Cordero et al. selects based on certain performance characteristics, the performance characteristics are not determined by analyzing how the respective players have played the game based upon game skill and patterns of the play. As disclosed in pg 6, par 51 of Cordero et al., the request from the client computer 200 to locate a game server 134 includes the performance characteristics and the matchmaker server matches players **based upon the performance characteristics included in the request of the players.**

Thus, claims 1, 12 and 20 are now allowable over the cited prior art.

**Claims 2-4 and 8-11**

Claims 2-4 and 8-11 depend from independent claim 1 and, as such, are in allowable condition since claim 1 is clearly allowable over the cited prior art.

Claims 13-17 and 19

Claims 13-17 and 19 depend from independent claim 12 and, as such, are in allowable condition since claim 12 is clearly allowable over the cited prior art.

Claims 4 and 19

Both claims 4 and 19 recite the following limitations:

“the game service is a computer card game and the patterns of the play includes patterns of the respective users’ betting.”

Cordero et al. does not teach or suggest the steps of (a) monitoring respective users’ actual playing of a card game; (b) analyzing how the respective users have played the card game based upon game skill and patterns of the respective users’ betting for the card game; and (c) determining a user’s game behavior pattern for the game selected by the user based on the user’s actual playing of the card game. Thus, claims 4 and 19 are now allowable over the cited prior art.

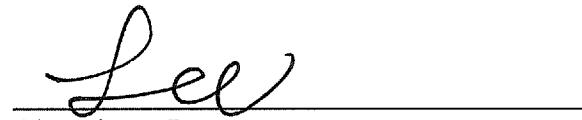
In light of the aforementioned amendments and discussion, Applicant respectfully submits that the application is now in condition for allowance.

If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner’s amendment, or if the Examiner should have any questions regarding the present amendment, it is respectfully requested that the Examiner please telephone Applicant’s undersigned attorney in this regard.

Application of: Won Seok Yoo  
Serial No.: 10/599,637  
Amendment C

Respectfully submitted,

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